

§21.151

USES OF SPECIALLY DENATURED ALCOHOL¹— Continued

Product or process	Code No.	Formulas authorized
Preserving solutions	430	1, 3-A, 3-C, 12-A, 13-A, 22, 23-A, 30, 32, 37, 38-B, 42, 44.
Product development and pilot plant (own use only).	812	All formulas.
Proprietary solvents	041	1, 3-A.
Refrigerating uses	740	1, 3-A, 3-C, 23-A, 30.
Resin coatings, natural	014	1, 23-A.
Resin coatings, synthetic.	012	1, 3-A, 3-C, 23-A, 30.
Resins, synthetic	590	3-A, 3-C, 29, 30, 35-A.
Room deodorants	470	3-A, 3-C, 22, 37, 38-B, 39-B, 39-C, 40, 40-A, 40-B, 40-C.
Rosin (processing)	354	1, 3-A, 3-C, 12-A.
Rotogravure dyes and solutions.	481	1, 3-A, 3-C, 13-A, 30, 32.
Rubber (latex) (processing).	355	1, 3-A, 3-C.
Rubber, synthetic	580	29, 32.
Rubbing alcohol	220	23-H.
Scientific instruments ...	710	1, 3-A, 3-C.
Shampoos	141	1, 3-A, 3-B, 3-C, 23-A, 27-B, 31-A, 36, 38-B, 39-A, 39-B, 40, 40-A, 40-B, 40-C.
Shellac coatings	013	1, 23-A.
Soaps, industrial	440	1, 3-A, 3-C, 23-A, 30.
Soaps, toilet	142	1, 3-A, 3-C, 23-A, 30, 36, 38-B, 39-B, 39-C, 40, 40-A, 40-B, 40-C.
Sodium ethylate, anhydrous (restricted).	524	2-B.
Sodium hydrosulfite (dehydration).	312	1, 2-B, 3-A, 3-C.
Soldering flux	035	1, 3-A, 3-C, 23-A, 30.
Solutions, miscellaneous.	485	1, 3-A, 3-C, 23-A, 30, 40-C.
Solvents and thinners (other than proprietary solvents or special industrial solvents).	042	1, 23-A, 30.
Solvents, special (restricted sale).	043	1, 3-A, 3-C.
Stains (wood)	053	1, 3-A, 3-C, 23-A, 30.
Sterilizing solutions	430	1, 3-A, 3-C, 12-A, 13-A, 22, 23-A, 30, 32, 37, 38-B, 42, 44.
Theater sprays	470	3-A, 3-C, 22, 37, 38-B, 39-B, 39-C, 40, 40-A, 40-B, 40-C.
Tobacco sprays and flavors.	460	4.
Toilet waters	122	38-B, 39, 39-A, 39-B, 39-C, 40, 40-A, 40-B, 40-C.
Transparent sheetings ..	032	1, 2-B, 3-A, 3-C, 13-A, 23-A.
Unclassified uses ²	900	1, 3-A, 3-C.
Vaccine (processing)	343	1, 2-B, 3-A, 3-C, 12-A, 13-A, 23-A, 30, 32, 35-A.
Vinegar	511	18, 29, 35-A.
Vitamins (processing) ...	342	1, 2-B, 3-A, 3-C, 12-A, 13-A, 23-A, 30, 32, 35-A.
Xanthates	573	1, 2-B, 29.

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USES OF SPECIALLY DENATURED ALCOHOL¹— Continued

Product or process	Code No.	Formulas authorized
Yeast (processing)	342	1, 2-B, 3-A, 3-C, 12-A, 13-A, 23-A, 30, 32, 35-A.

¹Other products or processes may be authorized by the Chief, Chemical Branch, under § 21.31(c).

²Persons desiring other formulas for this use should indicate the fact in the space provided for this purpose on ATF Form 5150.19.

[T.D. ATF-133, 48 FR 24673, June 2, 1983, as amended by T.D. ATF-199, 50 FR 9183, Mar. 6, 1985]

Subpart G—Denaturants Authorized for Denatured Spirits

§21.151 List of denaturants authorized for denatured spirits.

Following is an alphabetical listing of denaturants authorized for use in denatured spirits:

DENATURANTS AUTHORIZED FOR COMPLETELY DENATURED ALCOHOL (C.D.A.), SPECIALLY DENATURED ALCOHOL (S.D.A.), AND SPECIALLY DENATURED RUM (S.D.R.)

Acetaldehyde	S.D.A. 29.
Acetone, U.S.P	S.D.A. 23-A, 23-H.
Acetaldo	C.D.A. 18.
Almond oil, bitter, N.F.X	S.D.A. 38-B.
Ammonia, aqueous	S.D.A. 36.
Ammonia solution, strong, N.F	S.D.A. 36.
Anethole, N.F	S.D.A. 38-B.
Anise oil, N.F	S.D.A. 38-B.
Bay oil (myrcia oil), N.F.XI	S.D.A. 23-F, 38-B, 39-D.
Benzaldehyde, N.F	S.D.A. 38-B.
Benzene	S.D.A. 2-B, 2-C, 12-A.
Bergamot oil, N.F.XI	S.D.A. 23-F, 38-B.
Bone oil (Dipple's oil)	S.D.A. 17.
Boric acid, N.F	S.D.A. 38-F.
Brucine alkaloid	S.D.A. 40.
Brucine sulfate, N.F.IX	S.D.A. 40.
n-Butyl alcohol	S.D.A. 44.
tert-Butyl alcohol	S.D.A. 39, 39-A, 39-B, 40, 40-A, 40-B, 40-C.
Camphor, U.S.P	S.D.A. 27, 27-A, 38-B.
Caustic soda, liquid	S.D.A. 36.
Cedar leaf oil, U.S.P.XIII	S.D.A. 38-B.
Chloroform	S.D.A. 20.
Chlorothymol, N.F.XII	S.D.A. 38-B, 38-F.
Cinchonidine	S.D.A. 39-A.
Cinchonidine sulfate, N.F.IX	S.D.A. 39-A.
Cinnamic aldehyde (cinnamaldehyde), N.F.IX	S.D.A. 38-B.
Cinnamon oil, N.F	S.D.A. 38-B.
Citronella oil, natural	S.D.A. 38-B.
Clove oil, N.F	S.D.A. 27-A, 38-B.
Coal tar, U.S.P	S.D.A. 38-B.
Denatonium benzoate, N.F. (BITREX)	S.D.A. 1, 40-B.
Diethyl phthalate	S.D.A. 39-B, 39-C.
Ethyl acetate	S.D.A. 29, 35, 35-A.

Bureau of Alcohol, Tobacco and Firearms, Treasury

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DENATURANTS AUTHORIZED FOR COMPLETELY DENATURED ALCOHOL (C.D.A.), SPECIALLY DENATURED ALCOHOL (S.D.A.), AND SPECIALLY DENATURED RUM (S.D.R.)—Continued

Ethyl ether	S.D.A. 13-A, 19, 32.
Eucalyptol, N.F.XII	S.D.A. 37, 38-B.
Eucalyptus oil, N.F	S.D.A. 38-B.
Eugenol, U.S.P	S.D.A. 38-B.
Formaldehyde solution, U.S.P	S.D.A. 22, 38-C, 38-D.
Gasoline	S.D.A. 18, 19; S.D.A. 28-A.
Gasoline, unleaded	C.D.A. 18, 19, 20; S.D.A. 28-A.
Gentian violet	S.D.A. 33.
Gentian violet, U.S.P	S.D.A. 33.
Glycerin (Glycerol), U.S.P	S.D.A. 31-A.
Green soap, U.S.P	S.D.A. 27-B.
Guaiacol, N.F.X	S.D.A. 38-B.
Heptane	C.D.A. 18, 19; S.D.A. 28-A.
Hydrochloric acid, N.F	S.D.A. 38-F.
Iodine, U.S.P	S.D.A. 25, 25-A.
Isopropyl alcohol	S.D.A. 3-C.
Kerosene	C.D.A. 18, 19, 20.
Kerosene (deodorized)	C.D.A. 18, 19, 20.
Lavender oil, N.F	S.D.A. 27-B, 38-B.
Menthol, U.S.P	S.D.A. 37, 38-B, 38-C, 38-D, 38-F.
Mercuric iodide, red, N.F.XI	S.D.A. 42.
Methyl alcohol	S.D.A. 1, 3-A, 30.
Methylene blue, U.S.P	S.D.A. 4; S.D.R. 4.
Methyl isobutyl ketone	C.D.A. 18, 19; S.D.A. 1, 23-H.
Methyl n-butyl ketone	C.D.A. 18, 19; S.D.A. 1.
Methyl salicylate, N.F	S.D.A. 38-B, 46.
Mustard oil, volatile (allyl isothiocyanate), U.S.P.XII.	S.D.A. 38-B.
Nicotine solution	S.D.A. 4; S.D.R. 4.
Nitropropane, mixed isomers of	C.D.A. 18, 19; S.D.A. 1.
Peppermint oil, N.F	S.D.A. 38-B.
Phenol, U.S.P	S.D.A. 38-B, 46.
Phenyl mercuric benzoate	S.D.A. 42.
Phenyl mercuric chloride, N.F.IX	S.D.A. 42.
Phenyl mercuric nitrate, N.F	S.D.A. 42.
Phenyl salicylate (salol), N.F.XI	S.D.A. 38-B.
Pine needle oil, dwarf, N.F.	S.D.A. 38-B.
Pine oil, N.F.	S.D.A. 38-B.
Pine tar, U.S.P	S.D.A. 3-B.
Polyisobutylene 80, N.F.	S.D.A. 38-F.
Potassium iodide, U.S.P	S.D.A. 25, 25-A, 42.
Pyridine bases	S.D.A. 6-B.
Pyronate	C.D.A. 18.
Quassia, fluid extract, N.F.VII	S.D.A. 39.
Quassin	S.D.A. 40.
Quinine, N.F.X	S.D.A. 39-A.

DENATURANTS AUTHORIZED FOR COMPLETELY DENATURED ALCOHOL (C.D.A.), SPECIALLY DENATURED ALCOHOL (S.D.A.), AND SPECIALLY DENATURED RUM (S.D.R.)—Continued

Quinine bisulfate, N.F.XI	S.D.A. 39-A, 39-D.
Quinine dihydrochloride, N.F.XI	S.D.A. 39-A.
Quinine sulfate, U.S.P	S.D.A. 39-D.
Resorcinol (Resorcin), U.S.P	S.D.A. 23-F.
Rosemary oil, N.F. XII	S.D.A. 27, 38-B.
Rubber hydrocarbon solvent	C.D.A. 18, 19, 20; S.D.A. 2-B, 2-C, 28-A.
Safrole	S.D.A. 38-B.
Salicylic acid, U.S.P	S.D.A. 23-F, 39.
Sassafras oil, N.F.XI	S.D.A. 38-B.
Shellac (refined)	S.D.A. 45.
Soap, hard, N.F.XI	S.D.A. 31-A.
Sodium iodide, U.S.P	S.D.A. 25, 25-A.
Sodium, metallic	S.D.A. 2-C.
Sodium salicylate, U.S.P	S.D.A. 39, 39-D.
Spearmint oil, N.F	S.D.A. 38-B.
Spearmint oil, terpenelless	S.D.A. 38-B.
Spike lavender oil, natural	S.D.A. 38-B.
Storax, U.S.P	S.D.A. 38-B.
Sucrose octaacetate	S.D.A. 40-A.
Thimerosal, U.S.P	S.D.A. 42.
Thyme oil, N.F.XII	S.D.A. 38-B.
Thymol, N.F	S.D.A. 37, 38-B, 38-F.
Tolu balsam, U.S.P	S.D.A. 38-B.
Toluene	S.D.A. 2-B, 2-C, 12-A.
Turpentine oil, N.F.XI	S.D.A. 38-B.
Vinegar	S.D.A. 18.
Zinc chloride, U.S.P	S.D.A. 38-F.

Subpart H—Weights and Specific Gravities of Specially Denatured Alcohol

§ 21.161 Weights and specific gravities of specially denatured alcohol.

The weight of one gallon of each formula of specially denatured alcohol at 15.56 °C. (60 °F.) is as listed in this section. The specific gravity of each formula of specially denatured alcohol at 15.56 °C./15.56 °C. (60 °F./60 °F.) in air is as listed in this section. (Weight of 1 gallon of water at 15.56 °C. (60 °F.) is 8.32823 pounds in air.)

WEIGHTS AND SPECIFIC GRAVITIES OF SPECIALLY DENATURED ALCOHOL¹

[Slight deviations from this table may occur due to variations in specific gravities of authorized denaturants. Values for 190 proof determined experimentally in air. Other values calculated from these gravities.]

S.D.A. Formula No.	Finished formula (gals)	190 proof		192 proof		200 proof	
		Wt./gal. in air (lbs)	Sp. gr. in air	Wt./gal. in air (lbs)	Sp. gr. in air	Wt./gal. in air (lbs)	Sp. gr. in air
1	104.0	6.788	.8151	6.756	.8112	6.611	.7938
2-B	100.5	6.795	.8159	6.762	.8119	6.612	.7939
2-C	99.5	6.959	.8356
3-A	105.0	6.787	.8149	6.755	.8111	6.611	.7938
3-B	101.0	6.810	.8177	6.777	.8137	6.627	.7957
3-C	105.0	6.784	.8146	6.752	.8107	6.608	.7935
4	100.8	6.823	.8193	6.791	.8154	6.640	.7973